INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM

Property/District Name: Fenby Farm Quarry and Lime Kiln Survey Number: 18CR163/CARR-260

Project: Fenby Farm Quarry and Lime Kiln (FY97 grant) Agency: MHT Non-Captial Grant

Site visit by MHT Staff: ___ no __X yes Name Beth Cole Date Aug. 14, 1997

Eligibility recommended __X__ Eligibility **not** recommended ____

Criteria: ___A ___B __X C __X D Considerations: ___A ___B ___C ___D ___E ___F ___G __

Justification for decision: (Use continuation sheet if necessary and attach map)

The Phase I/II study encompassed archival background research, archeological survey and testing, laboratory processing, and analyses to evaluate the National Register eligibility of the Fenby Farm Quarry and Lime Kiln (18CR163/CARR-260). The property represents a 19th c. industrial complex which operated from c. 1844 - 1907 and produced lime for construction aggregate, fertilizer, and whitewash. Archeological testing identified 17 features and activity areas associated with the industrial operations. Key features include a complex of three kilns, a limestone quarry, and connecting road traces. The kiln complex includes an intermittent kiln (c. 1844), a perpetual kiln with a dated cornerstone of 1889, and another perpetual kiln (c. 1892). Test excavations revealed post holes and various working surfaces (including wood, stone, mortar, and cement like surfaces) at the base of the kilns. Testing recovered a small assemblage of artifacts associated with the lime operations - including a wheel barrow, shovel, tin cup, and other metal tools in the fill deposits near the bottom of the kilns. These artifacts were likely deposited in the kilns shortly after they ceased operations. Although recent modern development surrounds the site area, the site features retain good integrity with minimal disturbances.

The Phase I/II investigations determined that the Fenby Farm Quarry and Lime Kiln (18CR163/CARR-260) is eligible for the National Register of Historic Places under Criteria C and D. The complex embodies important characteristics and methods of construction representative of the evolving technology and architectural design of the lime industry throughout the 19th century. Archeological testing demonstrated that the property has the potential to yield important information regarding the technological processes, changes, and architectural characteristics of 19th c. lime production. The site contributes to the Architecture and Economic themes identified in the *Maryland Comprehensive Historic Preservation Plan* (1986). We concur that the Fenby Farm Quarry and Lime Kiln (18CR163/CARR-260) meets the criteria for eligibility in the National Register of Historic Places.

Documentation on the property/district is presented in: Phase I/II Archeological Invest. Fenby Farm Quarry and Lime Kiln Site (18CR163/CARR-260) in Westminster, CR Co, MD

Prepared by: Lori Frye (Heritage Resources, Inc.)

Reviewer, Office of Preservation Services — Date 2/25/98

NR program concurrence: X yes ___ no ___ not applicable

Reviewer, NR program — Date 3/2/98

Survey No. 18CR163/CARR-260

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

_____	Eastern Shore	(all Eastern Shore counties, and Cecil)
_____	Western Shore	(Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
__X__	Piedmont	(Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
_____	Western Maryland	(Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

_____	Paleo-Indian	10000-7500 B.C.
_____	Early Archaic	7500-6000 B.C.
_____	Middle Archaic	6000-4000 B.C.
_____	Late Archaic	4000-2000 B.C.
_____	Early Woodland	2000-500 B.C.
_____	Middle Woodland	500 B.C. - A.D. 900
_____	Late Woodland/Archaic	A.D. 900-1600
_____	Contact and Settlement	A.D. 1570-1750
_____	Rural Agrarian Intensification	A.D. 1680-1815
__X__	Agricultural-Industrial Transition	A.D. 1815-1870
__X__	Industrial/Urban Dominance	A.D. 1870-1930
_____	Modern Period	A.D. 1930-Present
_____	Unknown Period (___ prehistoric	___ historic)

III. Prehistoric Period Themes:

_____	Subsistence
_____	Settlement
_____	Political
_____	Demographic
_____	Religion
_____	Technology
_____	Environmental Adaption

IV. Historic Period Themes:

_____	Agriculture
__X__	Architecture, Landscape Architecture, and Community Planning
__X__	Economic (Commercial and Industrial)
_____	Government/Law
_____	Military
_____	Religion
_____	Social/Educational/Cultural
_____	Transportation

V. Resource Type:

Category: structure, building

Historic Environment rural

Historic Function(s) and Use(s): quarry and lime kiln operation (c.1844-1907)

Known Design Source: none

CARR-260

Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Westminster

This site was recently described, erroneously, as the remains of Leigh Masters iron furnace. While the furnace was in the general vicinity, the structure in question is a lime kiln, and is the only survivor of the Fenby Farm (CARR-407). The farm was sold in 1829 to Joseph Orndorff. Orndorff apparently lived on the premises and farmed it. According to the Democrat and Carroll County Republican for 1 January 1844, Joseph Stoudt was selling lime at nine cents per bushel at his kiln on Joseph Orndorff's farm. Joseph sold the farm to William H. Orndorff for $10,000. He advertised in the 1877 atlas "Wm. H. Orndorff, Farmer; also has for sale Lime Stone and Lime. William Orndorff mortgaged his property and eventually got into financial trouble. He was forced to sell the farm in 1888, and its mineral resources were described. "Its quarries yield the finest limestone to be found in this section of the State. The lime obtained here has always stood in high favor with builders and is equally useful for the fertilization of land." The farm was purchased by William Fenby, apparently for his son, William F. Fenby, who continued the lime operation. Fenby sold the farm in 1905 to the B. F. Shriver Company of Westminster. The company not only used the farm to raise crops for its large-scale canning operation, but apparently continued to operate the quarry for some time. It is not known when the quarry and kiln ceased operation.

Survey No. CARR-260

Magi No.

DOE __yes __no

Maryland Historical Trust State Historic Sites Inventory Form

MARYLAND INVENTORY OF HISTORIC PROPERTIES

1. Name (indicate preferred name)

historic Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln

and/or common Leigh Master's Iron Foundry

2. Location

street & number Fenby Farm Road ___ not for publication

city, town Westminster ___ vicinity of congressional district

state Maryland county Carroll

3. Classification

Category	Ownership	Status	Present Use	
___ district	___ public	___ occupied	___ agriculture	___ museum
___ building(s)	_X_ private	___ unoccupied	___ commercial	_X_ park
_X_ structure	___ both	_X_ work in progress	___ educational	___ private residence
___ site	**Public Acquisition**	**Accessible**	___ entertainment	___ religious
___ object	_X_ in process	_X_ yes: restricted	___ government	___ scientific
	___ being considered	___ yes: unrestricted	___ industrial	___ transportation
	___ not applicable	___ no	___ military	___ other:

4. Owner of Property (give names and mailing addresses of all owners)

name

street & number telephone no.:

city, town state and zip code

5. Location of Legal Description

courthouse, registry of deeds, etc. Courthouse Annex liber

street & number 55 North Court Street folio

city, town Westminster state Maryland

6. Representation in Existing Historical Surveys

title

date ___ federal ___ state ___ county ___ local

depository for survey records

city, town state

7. Description

Survey No. CARR-260

Condition		Check one	Check one
___ excellent	___ deteriorated	_X_ unaltered	_X_ original site
___ good	___ ruins	___ altered	___ moved date of move _____
_X_ fair	___ unexposed		

Prepare both a summary paragraph and a general description of the resource and its various elements as it exists today.

Contributing Resources: 1

Summary:

The Fenby Farm limekilns (Leigh Master's Iron Foundry) are located on the northeast side of Fenby Farm Road, just north of a small creek, and about ⅛ mile west of the New Windsor Road (Route 31). The kilns are banked into a hill on the northeast, with a rubble stone wall on the southwest. The southern corner is squared off, and there is a short wall on the southeast that is battered and extends back into the hillside. At the base of the southwest wall, to the south, is a semi-circular red brick arch of three header courses. At the back of the opening is a rubble stone wall with a 2-foot wide opening in it. It opens at the rear into the southeastern lime kiln. The kiln is about 7 feet in diameter at the top. The bricks lining it appear to be of fire clay. The center kiln also has a semi-circular arched opening at the base of the southwest wall, but it is mostly buried in debris. To the southeast of the arch the stone wall has collapsed, and the shaft of the kiln has also collapsed. The northwest structure apparently was not a kiln, as it is different than the other two structures. The opening at the base of the southwest wall is about 1 foot eight inches wide, and the stones are corbelled. The opening is at least 6 feet deep, is corbelled all the way back, and has stone lintels on the top for its entire depth. On the southeast side of the Fenby Farm Road is the quarry for the lime kilns.

The Fenby Farm limekilns (Leigh Master's Iron Foundry) are located on the northeast side of Fenby Farm Road, just north of a small creek, and about ⅛ mile west of the New Windsor Road (Route 31). It is within the expanded corporate limits of Westminster, in central Carroll County, Maryland.

The kilns are banked into a hill on the northeast, with a rubble stone wall on the southwest. The southern corner is squared off, and there is a short wall on the southeast that is battered and extends back into the hillside. At the base of the southwest wall, to the south, is a semi-circular red brick arch of three header courses. This opening is 8 feet wide by 4 feet 6 inches deep. At the back of the opening is a rubble stone wall with a 2-foot wide opening in it. The opening has a stone lintel at the front and appears to have a metal lintel toward the rear. The wall thickness of this opening is 2 feet, and it opens at the rear into the southeastern lime kiln. There is a "U"-shaped piece of metal hanging from the lintel in the opening. The bottom of the arch and opening are now filled with dirt and debris. Set in the top of the wall, just southeast of center of the

8. Significance

Survey No. CARR-260

Period	Areas of Significance—Check and justify below				
___ prehistoric	___ archeology-prehistoric	___ community planning	___ landscape architecture	___ religion	
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science	
___ 1500–1599	_X_ agriculture	___ economics	___ literature	___ sculpture	
___ 1600–1699	___ architecture	___ education	___ military	___ social/ humanitarian	
___ 1700–1799	___ art	_X_ engineering	___ music	___ theater	
_X_ 1800–1899	___ commerce	___ exploration/settlement	___ philosophy	___ transportation	
___ 1900–	___ communications	_X_ industry	___ politics/government	___ other (specify)	
		___ invention			

Specific dates **Builder/Architect**

check: Applicable Criteria: __A __B __C _XD
and/or
Applicable Exception: __A __B __C __D __E __F __G

Level of Significance: __national __state X local

Prepare both a summary paragraph of significance and a general statement of history and support.

Summary:

This site was recently described, erroneously, as the remains of Leigh Masters iron furnace. While the furnace was in the general vicinity, the structure in question is a lime kiln, and is the only survivor of the Fenby Farm (CARR-407). The farm was sold in 1829 to Joseph Orndorff. Orndorff apparently lived on the premises and farmed it. According to the Democrat and Carroll County Republican for 1 January 1844, Joseph Stoudt was selling lime at nine cents per bushel at his kiln on Joseph Orndorff's farm. Joseph sold the farm to William H. Orndorff for $10,000. He advertised in the 1877 atlas "Wm. H. Orndorff, Farmer; also has for sale Lime Stone and Lime. William Orndorff mortgaged his property and eventually got into financial trouble. He was forced to sell the farm in 1888, and its mineral resources were described. "Its quarries yield the finest limestone to be found in this section of the State. The lime obtained here has always stood in high favor with builders and is equally useful for the fertilization of land." The farm was purchased by William Fenby, apparently for his son, William F. Fenby, who continued the lime operation. Fenby sold the farm in 1905 to the B. F. Shriver Company of Westminster. The company not only used the farm to raise crops for its large-scale canning operation, but apparently continued to operate the quarry for some time. It is not known when the quarry and kiln ceased operation.

Geographic Organization: Piedmont
Chronological/Development Period: Agriculture-Industrial Transition A.D. 1815-1870; Industrial/Urban Dominance A.D. 1870-1930
Historic Period Themes: Architecture, Economic
Resource Types: Lime kilns, Rural vernacular

This site was recently described, erroneously, as the remains of Leigh Masters iron furnace. While the furnace was in the general vicinity, the structure in question is a lime kiln, and is the only survivor of the Fenby Farm (CARR-407). The farm was sold by William and John Roberts, who ran a general store in Uniontown, in 1829 to Joseph Orndorff. Orndorff apparently lived on the premises and farmed it, though he also

9. Major Bibliographical References

Survey No. CARR-260

Carroll County Land Records
1862 & 1877 maps
Tax assessments, 1841, 1852, 1866, 1866-76, 1876
American Sentinel, 29 Sept. 1888, p. 2
Democratic Advocate, 7 May 1892, p. 2
American Farmer v. 7, n. 2 (1825), pp.9-10; v. 6, n. 15 (1824) p. 119; Feb. 1858, pp. 253-4; mar. 1858, pp. 288-9.
American Agriculturist, v. 1, p. 374; v. 2, p.18
Scharf, History of Western Maryland, pp. 958-9.
Maryland Geological Survey, v. 8 (1909) p. 362; v.9, (1911) p.216
Amos Long, Jr. "Pennsylvania Limekilns" Pennsylvania life (Sprin 1966), pp. 25-37.
Carol Lee, Legacy of the Land, p. 46

10. Geographical Data

Acreage of nominated property _____

Quadrangle name _____ **Quadrangle scale** _____

UTM **References** do NOT complete UTM references

A	Zone	Easting	Northing	B	Zone	Easting	Northing
C				D			
E				F			
G				H			

Verbal boundary description and justification

List all states and counties for properties overlapping state or county boundaries

state	code	county	code
state	code	county	code

11. Form Prepared By

name/title Kenneth M. Short, Historic Planner

organization Carroll County Department of Planning **date** April 26, 1994

street & number 225 North Center Street **telephone** (410) 857-2145

city or town Westminster **state** Maryland

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
Shaw House
21 State Circle
Annapolis, Maryland 21401
(301) 269-2438

MARYLAND HISTORICAL TRUST
DHCP/DHCD
100 COMMUNITY PLACE
CROWNSVILLE, MD 21032-2023
514-7600

PS-2746

arch, is a large, roughly squared stone block that appears to be marble. It is weathered, and there is no visible carving on it. The kiln is about 7 feet in diameter at the top. The bricks lining it appear to be of fire clay. There are at least three sailor courses, with a header course below them, then additional sailor courses. The shaft of the kiln is well-filled with dirt and debris.

The center kiln also has a semi-circular arched opening at the base of the southwest wall, but it is mostly buried in debris. It, too, has three header courses of red brick in the arch, and is about 9 to 10 feet wide. The bottom two courses have partly collapsed and the top course shows some deterioration. The depth of the opening is at least 6 feet back to a stone wall. To the southeast of the arch the stone wall has collapsed, and the shaft of the kiln has also collapsed, leaving no visible brick above the dirt and debris. Southwest of the arched opening, the stone wall is fairly well intact.

On the northwest end, the wall curves somewhat so that it faces basically due south. At the far northwest end is a short stone retaining wall that runs northeast-southwest, from the corner of the kiln wall. The northwest structure apparently was not a kiln, as it is different than the other two structures. The opening at the base of the southwest wall is about 1 foot eight inches wide, and the stones are corbelled in to a width of about 11 inches, with a large stone lintel placed on top. The opening is sufficiently filled and the ground level raised to prohibit measuring the height of the opening. There is a metal pintle set into the stone face where the corbelling begins, suggesting that this opening once had a door. The opening is at least 6 feet deep, is corbelled all the way back, and has stone lintels on the top for its entire depth. There is one stone at the rear of the opening that closes off part of it; it is not clear whether this is part of the structure or simply debris. Most of the stone wall above this opening has collapsed, but it appears that it may have had a circular shaft.

Southwest of the kiln is much concrete debris. Some of it is concrete collars for hole-set posts. On the southeast side of Fenby Farm Road is the quarry for the lime kilns. It has a steep rock face on the northwest, with lower sides on the southwest and southeast, and is accessible from the road on the northeast. The floor of the quarry is littered with limestone/marble, a car, garbage, some concrete, and a piece of (granite?) stone that is finished on several sides, with visible tool marks.

owned a tavern stand in Westminster and a new brick house there in 1841. He also owned two slaves, one man aged 14-45 and a woman over the age of 36, who helped to run the farm. It was apparently a successful operation; his livestock was worth $651 in 1841 and $854 in 1852, both substantial amounts for the period. Orndorff had other business operations, as well. According to the Democrat and Carroll County Republican for 1 January 1844, Joseph Stoudt was selling lime at nine cents per bushel at his kiln on Joseph Orndorff's farm.

The 1866 tax assessment notes that this farm had a brick house, a frame barn, and a limestone quarry. It was only one of two farms Orndorff owned, however, and it is not possible to determine on which one he was living. The 1862 map shows his house, but does not indicate the quarry or kiln, though we know they existed. In 1871 he began divesting himself of some of his property and investments, probably with the thought of retiring. Probably also towards this end, in 1872 he sold some mineral rights to the Ashland Iron Company of Baltimore County for a term of ten years. In the arrangement, Orndorff granted the Company the right to mine, wash, and dump ore in two fields of roughly 30 acres that were located on the west side of the Westminster to New Windsor Road, on a part of the farm that was now occupied by William H. Orndorff. In return, Joseph Orndorff received $50 per ton of ore mined, and was guaranteed an income of at least $1,000 a year.

Two years later Joseph sold the farm to William H. Orndorff for $10,000. William added a tenant house to the property, and seemed to be prosperous; in 1876, his livestock was worth $1,077 and his farming implements worth $285. He advertised in the 1877 atlas "Wm. H. Orndorff, Farmer; also has for sale Lime Stone and Lime. One and a quarter miles southwest of Westminster." There was plenty of competition, however. Also advertising for lime and limestone for sale around Westminster in 1877 were Thomas P. Goodwin, Josephus A. Orendorff, William Bachman, Henry B. Riegel, Joshua Corbin, E. Bankard, and Jacob Myerly.

William Orndorff mortgaged his property and eventually got into financial trouble. He was forced to sell the farm in 1888, and it was described then as having ". . . an excellent Brick Dwelling House, a good Switzer Barn, Summer Kitchen, Hog House and all other necessary outbuildings, and also Three Tenant Houses." More important was the description of its mineral resources.

> Its quarries yield the finest limestone to be found in this section of the State. The lime obtained here has always stood in high favor with builders and is equally useful for the fertilization of land. There is also an abundant supply of Iron Ore to be found on these premises.

The farm was purchased by William Fenby, apparently for his son, William F. Fenby, who continued the lime operation. He advertised in 1892:

> Lime! Lime! Lime!
> Having increased facilities for Burning Lime I am prepared to furnish Building, Whitewash and Agricultural lime, at reasonable rates. The analysis shows that there is none superior in the State.
>
> WM. F. FENBY, Avondale, Md.
> Kilns 1 mile from Westminster, on New Windsor Road.

Fenby sold the farm in 1905 to the B. F. Shriver Company of Westminster. The company not only used the farm to raise crops for its large-scale canning operation, but apparently continued to operate the quarry for some time. The Maryland Geological Survey report on the limestones of Maryland noted that:

> Of the small quarries that have been opened east of Wakefield and west of Parrs Ridge, the only one perhaps worth mentioning is situated about a mile nearly due north from Avondale, and about midway between Copps Branch and the road passing along the west flank of Parrs Ridge. This is known as the *B.F. Shriver Quarry*. . . .
>
> The white crystalline limestone of this quarry is intensely fissured and is overlain on the west by a thick mantle of volcanic rock of the amygdaloidal or "honey comb" type, prohibiting, except at a considerable cost, any further extensive development of this side of the quarry. The Shriver Quarry is no exception to the fact, to which attention has already been called, that when the limestones of this region occur much fissured and intimately associated with volcanics, they are usually high in magnesia. The content of magnesia in the Shriver Quarry is slightly over 10 per cent.

Two years later the Survey covered the iron ores of Maryland and returned to the site to report that:

> One mile west of Westminster at a fork of Copps Branch is a small opening from which ore was obtained and later limestone quarried. The opening is now pretty well filled up and the only evidence of ore is pieces scattered around the ground.

It is not known when the quarry and kiln ceased operation.

Lime became an important component in farm improvement in the early nineteenth century. According to Carol Lee,

> Lime acted as a soil conditioner rather than a fertilizer. By neutralizing acidity, lime helped maintain soil granulation, promoted the growth of beneficial micro-organism like nitrogen-fixing bacteria and discouraged the growth of acid-loving fungus diseases.

The process may not have been well-understood, but the results were. In 1843, The American Agriculturist noted that a farm 30 miles west of Baltimore, near the Baltimore and Ohio Railroad (probably George Patterson's "Springfield") had poor quality soil that was markedly improved when the farmer purchased a limestone quarry 12 miles away, erected two large kilns at the depot near his farm, and railroaded the stone to his kilns for burning at a cost of 20 cents per bushel. This farmer applied 50 to 200 bushels per acre, at any season of the year. The lime was dumped in piles of 5 to 6 bushels each, allowed to air slake, and was then spread on the soil.

The agricultural press of the day often noted these facts, which seem to be typical for southeastern Pennsylvania and portions of Maryland. A traveller from New York to Mt. Vernon, Virginia in 1843 wrote that:

> Nothing can exceed the beauty of the highly cultivated farms for miles above and below, and west of Philadelphia . . . . These farms are worth from one to two hundred dollars per acre, even to the extent of fifty miles into the interior of the counties of Berks and Lancaster.
>
> Lime is the great basis of their manures in this region, and it is applied in no stinted quantity, as the exigencies of the land may require, from 50 to 150 bushels to the acre, once in eight, ten, or twelve years. This article costs from 10 to 30 cents per bushel upon the farm, as it may be more or less contiguous to the kilns and quarries. The cultivation between Philadelphia and Wilmington in Delaware is of a high order, and the country about the latter city is eminently beautiful. From thence, south to Baltimore, it gradually deteriorates, with a less capable soil; yet beautifully undulating in its surface, and abundantly susceptible of high cultivation, with a proper application to the soil of the mulch beds that abound in the swamps and the almost inexhaustible lime quarries, and marl beds;

The construction and operation of lime kilns was also of importance to the agricultural press, especially to the Baltimore based American Farmer. As early as 1825 they published plans and a description on local kilns which is worthy of noting in length.

Stone Lime

On the use of, as a manure - and on the construction of kilns for burning it. Baltimore county, 26th Feb. 1825.

TO THE EDITOR,

In answer to your inquiries, respecting the construction of Lime Kilns, and the use of Lime as a manure, I communicate the following results of my own experience.

A kiln in which a thousand bushels may be burned, I think the proper size. The mason's charge for building such a one, or of any given dimensions, four dollars for every hundred bushels the kiln, on trial, will turn out. The hearth is an oval, the longer diameter 7 feet 6 inches, and the shorter 5 feet 6 inches. About two feet above the hearth, the kiln is enlarged nine inches to form the bench, which serves for support a vault, called the arch, shaped like the upper part of an oven, constructed of the larger pieces of lime stone that are to be burned, and to receive the fuel beneath, and support the stone thrown in from the top. From the bench upward, the kiln is gradually expanded, preserving the shape of the inside of an egg shell, to its greatest dimension, sixteen feet across, and fourteen feet above the bench; thence it is contracted so as to be fourteen feet diameter at the top, the whole depth being eighteen feet. An excavation large enough to contain the whole structure except the breast and wing walls, is made in the side of a hill, for the convenience of approaching the top with carts to tilt in the stone on the arch. Two men can attend the burning, which takes two nights and three days, of unremitting labour. Four perches of stone, 24 feet 9 inches solid measure, yield one hundred bushels of lime, and two cords of half seasoned wood will burn that quantity. The drawings that accompany this communication, will assist to explain this description of a lime kiln.

My manner of spreading lime is, to mark on the ploughed ground so many squares as I intend to put bushes to the acre, and to place at every point where the lines intersect, a bushel of unslacked lime. After a few days, or after the first rain, the lime slakes and pulverizes, and is then easily spread by shovels with sufficient equality. The lime is measured from the kiln into carts drawn by two horses, that contain 15 bushels each, and the drivers, with each a hoe, draw out 15 heaps, as nearly equal as

they can, at the proper places. This I have found to be sufficiently accurate.

My first trial of lime for manure, was made in the year 1819, with 3,812 bushels, applied in quantities varying from 50 to 130 bushels to the acre, the land that received the greatest amount, is the most improved. One field, very much exhausted at that time, and not originally of good quality, I believe to have improved in its fertility three fold at least, on one part of it, and from another part of it I have sold two tons of timothy hay per acre, from the last mowing. I most cases I have spread lime on ploughed ground in the spring or winter, for Indian corn; its good effects have been perceptible on the corn crop, but more manifest in the improvement of the grain and grass succeeding the corn.

The use of lime for improving land is increasing very much in those parts of the county, sufficiently near lime stone to justify the expense. The price at the kilns in my neighbourhood, is 15 cents a bushel.

I have examined the relation of the Perpetual Kiln at use at Mauch Chunk, on the Lehigh, that you enclosed to me, and think our mode of burning more economical, even at the low price refuse Lehigh coal, can be purchased, *where it is much used*. To draw 60 bushels of lime, and replenish the kiln with coal and stone every morning, requires more constant attention than can be conveniently given, when the labour is in great part performed by the farm hand, who can be spared only at certain times from other work. The statement of a Pennsylvania Farmer, (in the American Farmer, vol. 6 p. 308,) who burned 700 bushels of lime with two tons of Lehigh coal, in a kiln constructed as those we now use, is much more encouraging; inasmuch as, reckoning two tons to be 58 bushels, he produced ten bushels of lime for one of coal; whereas the Mauch Chunk Perpetual Kiln takes from 8 to 12, an average of 10 bushels, to produce 60 - or only six of lime for one of coal.

I believe I have answered all your inquiries; but if any other should be suggested, it will give me great pleasure to give any information on this subject that I have, or can collect from sources worthy of credit - and am, with great respect and esteem,

Yours, JOHN PATTERSON.

The last cut is a section of the lime-kiln which has been in use for about two years at Mauch Chunk, on the Lehigh, the interior of which is circular. From this kiln, 60 bushels of lime was daily drawn, and required 8 to 12 bushels of the fine screenings of Lehigh coal to burn that quantity; or say one bushel of the screenings to burn six bushels of lime stone. The kiln is first lighted up with wood, by filling it one third full of oak wood, on

which throw a course of lime stone, say one foot thick, (the stone is broken up about the size of a man's head), on which put about 4 bushels of the coal; then alternate with stone and coal in the above proportions; until the kiln is heated it will make core, which is separated and thrown again into the kiln. The lime is drawn morning and evening. The rule is to draw the lime until it begins to look red with heat. And as soon as the drawing is made, fill it up again from the top with alternate layers of stone and coal, say six barrow loads of lime stone and one of fine coal, spread equally over the stone; care must be taken in putting on the last or top course of coal, to cover it all over the top so as to prevent the draft of the fire from breaking through in one part more than the other. If a larger quantity of lime than 60 bushels per day be wanted, there doubtless will be no difficulty arising by enlarging the kiln, to produce any required quantity, up to 200 bushels per day. The upper part of the kiln should not overhand more than six inches to 10 feet in height.

Further details were given a year earlier, in 1824, in The American Farmer:

Since the Farmers have found that Plaster of Paris has no longer much effect as a manure, many of them have begun to burn lime to put on their lands. The burning of lime is an art that few of them are acquainted with in Lancaster county; of course they consume more wood than if their kilns were properly constructed and tilled, as hereafter directed.

In Plymouth and Whitemarsh townships most of the lime is burnt that supplies Philadelphia. The experience of those who burn lime in these places has brought the art to a great degree of perfection. The bench of the kilns, (that is the part on which the arch is begun) is two feet high. From the bench to the top of the kiln sixteen feet. the eye of the kiln has an iron door which is always kept shut, except when putting in wood, which is all thrown into the arch, of course not any burnt in the eye. All the air is thro' the ash-hole, and must pass through the fire, which is much better than being admitted at the eye, except what unavoidedly passes in putting in wood. In setting or filling the kiln, when the arch is cleared, sticks of firewood are set on end, of six or eight inches diameter, the first circle around the crown of the arch - the next two feet from the first, and so on, the last circle about two feet from the wall of the kiln; the sticks in each circle to be about two feet apart. When the kiln is filled up to the top of the first set of sticks, then place others on the tops of these, and so continue them to near the top of the limestone. In Plymouth they generally burn one and a half cords of wood for every 100 bushels of lime

the kiln contains, and burn a kiln containing 1000 bushels in less than 48 hours.

A cord of wood burnt in two hours will produce double the intensity of heat that a cord burnt to four hours will give - hence the faster wood in consumed the less is required. Limestone must be heated to a certain degree before it will be lime and the sooner it is bro't to that degree, the sooner the process is finished, and the more wood is saved. Wood about half seasoned is better than wood dry or green.

A correspondent from Pennsylvania updated readers on current practices in an 1858 edition of The American Farmer.

We have in this county, (Montgomery, Pa.) three different kinds of kilns: And first, as to the building of a wood kiln: The breast wall should be 26 feet long, 4 feet thick, and 16 feet high; a space of five feet should be left in the middle, at the foundation, for the arch of the breast, and the arch should be 5½ feet high at the apex, and taper to 2 feet in width at the point where it opens into the *pot*, so as to form the *eye* of the kiln. Then the *pot* is to be started, at the same time, with the breast and arch, with a wall 16 inches thick, 5 feet wide in the clear, by 6 feet deep, and gradually battering back until, at the height of 11 feet, it attains the dimensions of 15 feet wide by 16 deep, and then be carried up straight 5 feet to the top. The space inside of the breast and around the pot must be filled to capacity, with earth, as the work progresses. It is best to select, if possible, a side-hill as a site for the kiln, as it will require less artificial embankment.

2. As to filling the kiln, in order to burn it off with wood: Build a wall 8 inches thick, and 18 inches high, around the bottom of the pot, leaving an aperture at the eye of the kiln 2 feet in width; on this wall place a layer of limestone, (not more than 8 inches long at first,) and then go on with successive layers of limestone, gradually increasing the thickness in such a way as to form a regular arch; this arch may be closed 18 inches above the top of the eye, so that the distance from the bottom of the pot to the keystone will be 7 feet. This is called "arching kiln," and requires considerable care and skill. After the kiln is arched and leveled off, nothing remains to be done, except to go on filling up with successive layers of limestone, until the kiln is a little more than *even full*; and then it may be "topped off" in the shape of a cone, with a small limestone.

3. The kiln being now filled, the next step is to prepare for burning. To do this, you must first put in a "false eye" - that is, close up the eye of the kiln with a loose wall, of the depth of 4 feet, leaving an aperture near the top, 18 inches wide and 2 feet high, to admit of the feeding of the kiln

with wood, and also another smaller aperture below, and near the bottom of the eye, 12 inches square, for the draft. This false eye, and that part of the breast-arch next to the pot, and the pot itself, must all be built of some kind of stone that will resist the action of fire, such as red sandstone or soapstone.

4. The next process is, to "burn off" the kiln. You begin by kindling a fire at the bottom of the pot, under the arched limestone, and keep it up by a supply of wood through the upper aperture of the eye. The kiln, at first, will take wood very slowly - not more than 2 cords the first 12 hours. As the mass of limestone becomes heated, the wood may be supplied more freely, and you may put in a "charge" of about one-sixth of a cord at intervals of from 15 to 20 minutes; the rule being, to keep up as brisk a fire as you reasonably can. On finishing each charge, the aperture for the wood is closed with a thin iron door or plate, which may readily be taken off for the next charge, and then be put on again, as before. The wood is cut 4 feet long, and is first put into the eye and then pushed into the fire with a pole. The kiln will be burned off in 48 hours or thereabouts; when the lime *settles* in the kiln to the depth of from 4 to 6 inches at the top, it is a sure indication that it is burned enough.

A kiln of the foregoing dimensions will hold 1400 bushels and will require 26 cords of oak wood to burn it. Each ton of limestone will make 16 bushels of lime, so that it would require nearly 88 tons of stone to fill the kiln. Four hands will fill a kiln in 1½ days, and 2 hands, working alternately 12 hours each, will burn it off in 48 hours. From these data, your correspondent can estimate the cost of burning a kiln at Cape May for himself. - The cost of building a kiln, if the stone can be furnished on the ground at 50 cents per perch, would be about $200.

The foregoing remarks apply to a kiln intended for purely wood-burnt lime. But if the same kind of kiln can be filled in the same way above described, until the first course of limestone is put in above the arch, and then a layer of anthracite coal is put around the walls, to alternate with each layer of limestone, a top may be put on the kiln to the height of four feet, so as to make the kiln hold about 1700 bushels - requiring to burn it off only about 27 cords of wood and 3 tons of Chestnut coal, the lime being almost, if not quite good as if burnt exclusively with wood. This latter is the method almost uniformly adopted in this region for manufacturing what is called "wood-burnt lime." The method of tending this kiln is the same as before mentioned, only it may be "let out" at the expiration of 36 hours, or when the arch is sufficiently burned, as indicated by the settling: the coal, however, will continue to burn for some hours longer, until all the upper layers of stone are calcined.

When the kiln is burned off, the false eye is taken out so as to afford a clear open space into the pot under the arch; the arch is then thrown gradually, and the lime falling down on a wooden platform prepared for the purpose, is measured or loaded up with great facility and convenience.

A Set-Kiln is built precisely like a wood-kiln; only it has a middle *bench* at the bottom, of an oval form, of the same height (18 inches) as the thin wall around the pot, so that in filling, one end of the first course of stone rests on the bench and the other on the inner wall: each layer of limestone is to be 18 inches thick, to be followed by a layer of anthracite coal 1½ inches thick, and so on alternately, until the kiln is full. A kiln holding 1700 bushels will require 10 tons of coal to burn it: the kind called stove coal is best, it will burn off in about 4 days or 96 hours; that portion of the limestone contiguous to the eye of the kiln, and not covered in the pot, must be plastered over with clay-mud; an aperture is left at the bottom of the eye to admit the draft. After the coal is ignited, by kindling at the bottom, the kiln requires no further "tending," but may be left to itself to burn off.

A Draw Kiln is built with a round pot; is much smaller than a Set Kiln, and it has no bench; a good size is 2 feet diameter at the bottom, tapering back to the width of 7½ feet at the bulge, and then carried plumb to the top. The kiln ought not to be less than 20 feet deep, and the bulge or greatest circumference should be about 5 feet from the top. The only fuel is anthracite coal - stove is the best - one ton of coal to every hundred bushels of lime. 200 bushels of lime may be drawn every 24 hours, and the great advantage of this kind of kiln is, that the lime may be always fresh.

Several correspondents described very sophisticated operations, generally in use in Europe, that do not seem to have been adopted in Carroll County. Perhaps the most sophisticated operation that might have been adopted was described and pictured in 1858, along with the process for slaking the lime.

Burning and Slaking - The form of kilns employed in burning lime varies; some being constructed inside in the shape of a hogshead, or of an egg, opened a little at each end, with the diameter at the bottom small, gradually widening towards the middle, and then contracting again toward the top; while others are made in the form of a sugar-loaf, with the small end down; others, again, are of an oblong-oval, in the ground-plan, as well as at the middle and top. The first of these forms is most generally in use, and when the sides are nearly perpendicular, it is observed that less fuel is necessary in consequence of the great degree of heat that is created, above

that which occurs in kilns formed in the shape of a sugar-loaf reversed. Near the bottom of large kilns, two or more openings are made for admitting the air necessary for supplying oxygen to the fire, and for dragging out the lime after it is burned.

Lime-kilns may be built either of stone or bricks; but the latter are considered preferable, particularly for the inside lining, as they are better adapted to stand a high degree of heat. They should always be situated at, or near, the quarry, and if possible, in the side of a cliff or bank; or they may be furnished with a "ramp," or inclined plane of earth or stone, for carting up the fuel and limestone to their tops. . . Another kiln of approved construction, suitable for burning lime with coal, or other dry, smokeless fuel, is denoted by the next diagram. It is supposed to be built at the side of a bank or cliff, of a circular form within, 32 feet high from the iron grating over the pits, 3 feet in diameter at the top, and 7 feet across, near the middle, at a point 18 feet above the grating. The walls are designed to be built of stone, from 3 to 6 feet thick, and lined with bricks. Below this shaft, or hollow of the kiln, are two arches or pits, each 3 feet wide and 3 feet high, divided by a partition wall, 18 inches thick, extending up the shaft 10 feet. About 18 inches from each arch, or pit, is an oven, say 2½ feet square, where coal is used for fuel, and somewhat deeper, where wood is employed, communicating with the shafts by narrow flues. Below the shafts, are two movable iron grates for dragging out the lime after it is burned. The ovens, as well as the arches under the shaft, are provided with iron doors, which are to be closed whenever it is desired to stop the draft.-An iron cap, or cover, is also provided to be placed over the top of the kiln, to prevent the escape of more heat than is necessary to keep up the combustion of the fuel. This cap is also furnished with a damper, or valve, for regulating the draft.

In a kiln like this, it is obvious that the limestone can be well burned, with a comparatively small amount of fuel, in winter as well as in summer, and that the farmer or others can be supplied with lime, at any time, without extinguishing the fire. All that is necessary to be done, is, to supply the broken limestone, and the fuel at the top of the kiln, and rake out the burned lime through the iron grate, or opening, at the bottom, as fast as occassion may require. In case it may be necessary to check the burning for a time, nothing more need be done than to close the iron doors at the bottom of the kiln, and the cover, or cap, at the top, when the fire may be kept alive for four or five days.

When the kiln is to be filled, the limestone should be broken into pieces about the size of a man's fist, and laid in alternate layers with the coal, usually in the proportion of three of the former to one of the latter;

but as limestones vary much in their character, the property quantity of fuel can only be regulated by trial. The coal should not be placed nearer the lining of the kiln than 8 or 9 inches, in order that the bricks may not melt nor burn.

When newly-burned lime is taken from the kiln, it has a strong tendency to "drink in" and combine with water. Hence, when exposed to the atmosphere, or covered over with sods in a shallow pit, it slowly absorbs moisture from the air, without developing much heat, increases in weight, swells, and gradually falls to powder. In this case, it is said to be *air-slacked*, or *spontaneously-slacked*. In rich limes, the increase of bulk may be from 3 to 3½ times; but in the poorer varieties, or such as contain much foreign matter, the increase may be less than twice their bulk.

If water be sprinkled or thrown upon the kind of lime named above, or if it be immersed in water for a short time, and then withdrawn, it absorbs the water, becomes hot, cracks, swells, throws off much watery vapor, and falls down in a short time to a bulky, more or less white, and almost impalapable powder. When the thirsty lime has thus fallen, it is said to be *slacked* or *quenched*. If more water be added, it is no longer "drunk in," but forms with the lime a paste; and, if sharp sand be added, a *mortar* is formed. In slaking, the water combines chemically with the lime; 3 pounds of which, when pure, take up a pound of water, and give 4 pounds of pulverulent, slaked lime. The more uniform and complete the operation of slaking, the finer the powder of the lime will be, and consequently the more equally it may be incorporated with the soil. Either excess or deficiency of water interferes with the uniform slaking. These effects are more or less rapid and striking, according to the quality of the lime, and the time that has been allowed to elapse after the burning, before the water was applied. All lime becomes difficult to slake when it has been for a long time exposed to the air. When the slaking is rapid, as in the rich limes, the heat produced is sufficient to kindle gunpowder strewn upon it, and the increase of bulk as before stated is from 2 to 3½ times. If the water be thrown on so rapidly or in such quantity as to chill the lime or any part of it, the powder will be gritty, will contain many little lumps, which refuse to slake, and will also be less bulky and less minutely divided, and therefore less fitted either for agricultural or building purposes.

It may be received as a general rule, however, that the best mode of slacking lime for agricultural purposes, is that which gives it the greatest, and reduces it to the most minute state of division. For the following reasons, the spontaneous method is preferred by many, as it is thought to be more economical and has a better effect on the crops to which it is applied. First, it causes the

lime to fall to the finest powder; and secondly, it is the least expensive, requiring less care and attention, and exposes the lime least to become "chilled" and gritty; but when thus left to itself, it should be laid up in heaps, covered with sods, and allowed to remain a sufficient time to slack, in order to prevent the surface of the heaps from being chilled or the whole converted into mortar by large or continued falls of rain; also to exclude the too free access of the air, which gradually brings back the lime to a half state of carbonate. Hence, the lime may be laid up in heaps, in the field in the winter, covered with sods, and left until it has completely fallen, or until the time is convenient for laying it upon the land, in spring or summer, when preparing for the ensuing crops.

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CARR-260
Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road

CHAIN OF TITLE

GRANTOR	HOME COUNTY	GRANTEE	HOME COUNTY	DATE	LIBER	FOLIO	TRANS-ACTION	COMMENTS
B. F. Shriver Co.	Carroll Westminster	B. F. Shriver Co., Inc.	Westminster Carroll	3-22-1934	160	100	Deed fee simple	$10.00 (13) Fenby Farm 171 acres, 2 deeds, 35 tracts
James Sutherland & Martha T. (wife)	Carroll	B. F. Shriver Co.	Carroll	6-17-1916	EOC 129	191	Deed fee simple	$430, 2 acres (13)
William F. Fenby & Annie O. (wife)	Carroll	Benjamin F. Frank Shriver & Thomas Herbert Shriver (B. F. Shriver & Co.)	Carroll	1-28-1905	DPS 100	514	Deed fee simple	$10,200, 169 acres (a) 167+ acres (b) 1 acre (13)
Charles E. Fink, trustee	Carroll	William F. Fenby	Carroll	8-1-1904	DPS 100	504	Deed	James M. Stoner v. unknown heirs of Mary Kelly (colored) $80.00, 1 acre (b)
William Fenby		William F. Fenby			wills GMP 8	402	Bequest	2 tracts (1) 167 acres (2) 64 sq. perches (a)
Rachel Pye, et al (colored)		William Fenby		4-2-1889	WNM 69	276	Deed	64 sq. perches (2)

CARR-260
Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road

CHAIN OF TITLE

GRANTOR	HOME COUNTY	GRANTEE	HOME COUNTY	DATE	LIBER	FOLIO	TRANS-ACTION	COMMENTS
Charles B. Roberts, attorney	?	William Fenby	Carroll	12-17-1888	WNM 68	444	Deed	167 acres, public sale, 10-3-1888, mortgage William H. Orendorff (1) to Samuel cover 4-17-1885, GAM22-192, $12,326.41 [no previous reference]
Joseph Orndorff	Carroll	William H. Orndorff	?	4-15-1874	JBB 43	450	Deed fee simple	$10,000, 159¾ acres (x) 150 acres (y) 9¾ acres mineral rights subject to a lease for iron ore made with the Ashland Iron Co. of Baltimore Co., 4-1-1876 for 10 yrs. JBB 40-425

CARR-260
Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road

CHAIN OF TITLE

GRANTOR	HOME COUNTY	GRANTEE	HOME COUNTY	DATE	LIBER	FOLIO	TRANS-ACTION	COMMENTS
Joseph Orndorff	Carroll	Ashland Iron Co.	Baltimore County	1-29-1872	JBB 40	425	Lease	ore banks on part of farm now occupied by William H. Orndorff, 2 fields bounding on county road from Westminster to New Windsor, on right hand side of road going from Westminster and lying between the tenant house of Joseph Orndorff and the orchard, 2 fields contain 30 acres. Begin 4-1-1872 Orndorff gets $.50 per ton mined. Mine, wash & dump ore, agree to mine at least enough to pay Orndorff $1,000 per year, will not come within 200 feet of any farm building.

CARR-260
Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road

CHAIN OF TITLE

GRANTOR	HOME COUNTY	GRANTEE	HOME COUNTY	DATE	LIBER	FOLIO	TRANS-ACTION	COMMENTS
William & John Roberts		Joseph Orndorff		5-28-1829	Frederick JS 32	510		(x)

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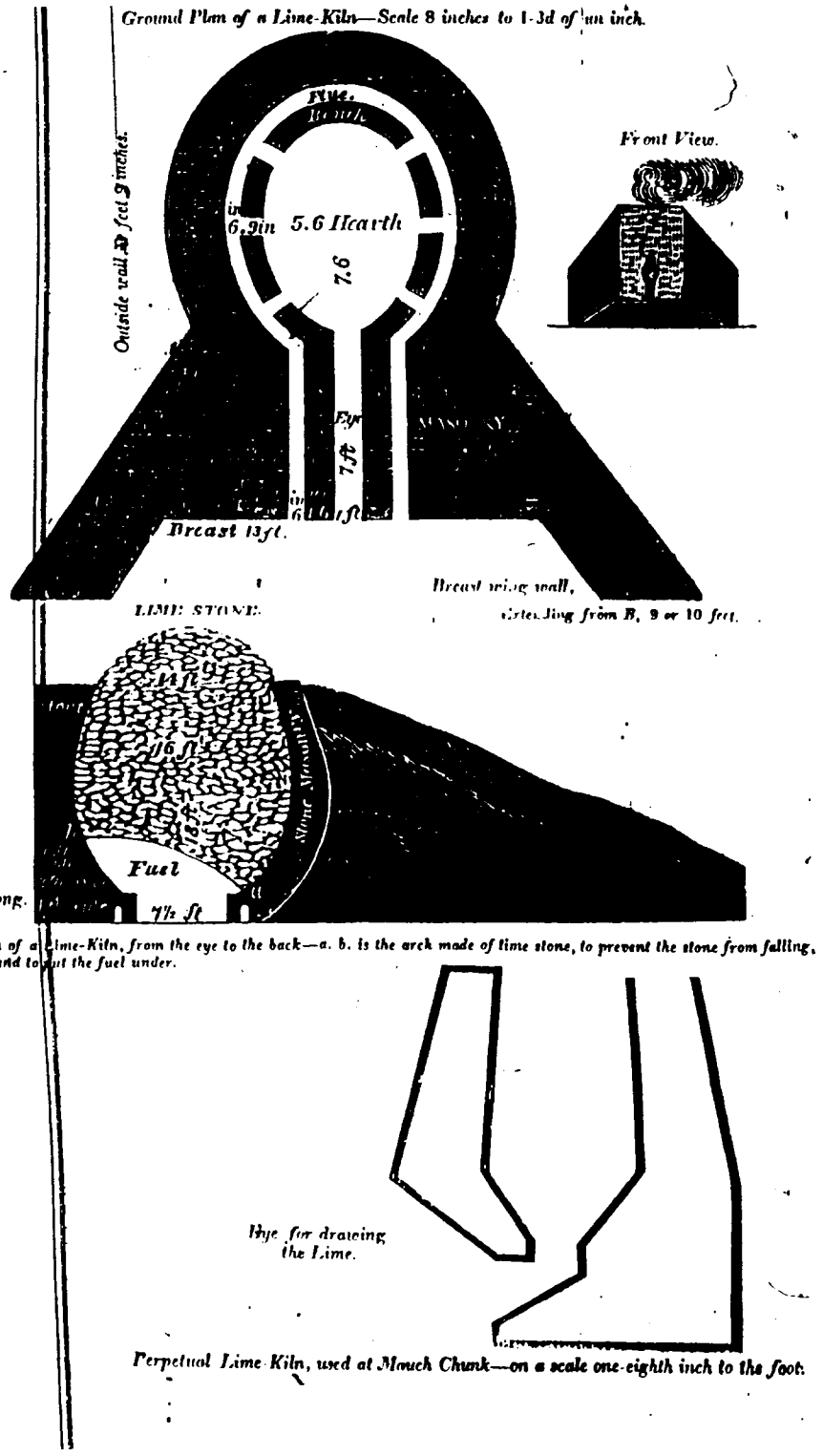
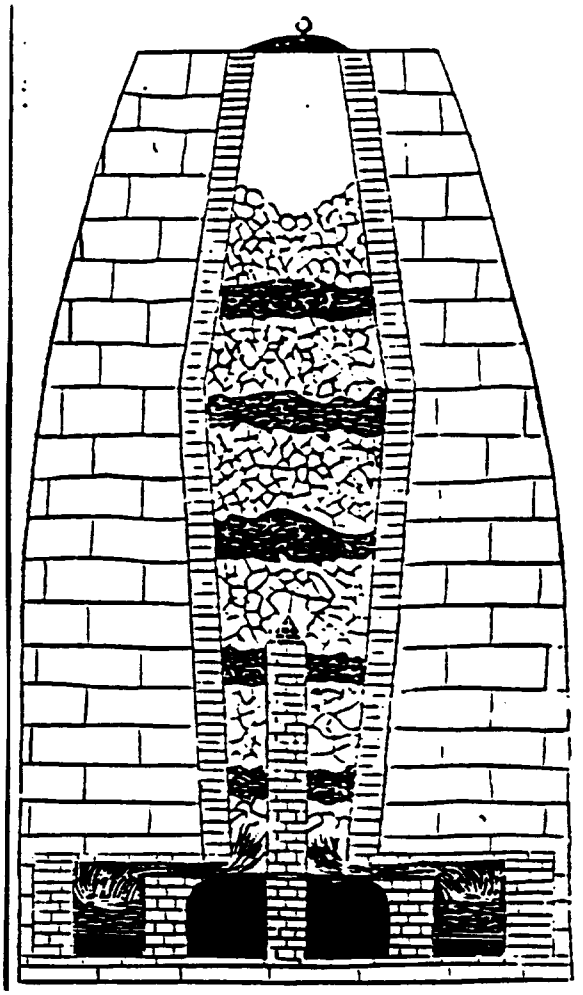


CARR-260
Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road

American Farmer
Baltimore
April 1825
v. 7. n. 2 p. 9



CARR-260
Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road

American Farmer
Baltimore
March 1858
p. 289

CARR - 260

LEIGH MASTER'S IRON FOUNDRY (SITE) 1760s

Fenby Farm Road Private
Westminster vicinity

Leigh Master, the builder of Avondale (see CARR - 48), established an iron furnace near his home in the 1760s. Tradition locates the furnace along Fenby Farm Road where the deteriorating ruins of some type of industrial structure have stood (the ruins are mentioned in Scharf's History of Western Maryland p. 926). Iron ore pits and slag piles are located on the property in front of Avondale, and this area was known for years as "Furnace Hills." The property is important as an early effort to establish an iron furnace industry in the state.

0702605327 CARR 260

Form 10-300
(Dec. 1968)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY – NOMINATION FORM

(Type all entries – complete applicable sections)

MD. HISTORICAL TRUST
BOX 1704
ANNAPOLIS, MD. 21404

STATE:

COUNTY:

FOR NPS USE ONLY

ENTRY NUMBER | DATE

SEE INSTRUCTIONS

1. NAME

COMMON: LEIGH MASTERS IRON FOUNDRY

AND/OR HISTORIC:

2. LOCATION

STREET AND NUMBER:

CITY OR TOWN: VIC. WESTMINSTER

STATE: MD. | CODE: | COUNTY: CARROLL | CODE:

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP		STATUS	ACCESSIBLE TO THE PUBLIC
District ☐ Building ☐	Public ☐	Public Acquisition:	Occupied ☐	Yes:
Site ☑ Structure ☐	Private ☑	In Process ☐	Unoccupied ☑	Restricted ☐
Object ☐	Both ☐	Being Considered ☐	Preservation work in progress ☐	Unrestricted ☐
				No: ☑

PRESENT USE *(Check One or More as Appropriate)*

Agriculturol ☐	Government ☐	Park ☐	Transportation ☐	Comments ☑
Commerciol ☐	Industrial ☐	Private Residence ☐	Other *(Specify)* ☐	RUINS
Educationol ☐	Military ☐	Religious ☐	_____	PARTLY
Entertoinment ☐	Museum ☐	Scientific ☐	_____	EXPOSED

4. OWNER OF PROPERTY

OWNERS NAME: DR. EARL GRISWOLD

STREET AND NUMBER: SWISSDALE FARM

CITY OR TOWN: WEST MINSTER | STATE: MD. | CODE:

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC: CARR. Cty

STREET AND NUMBER:

CITY OR TOWN: WEST MINSTER | STATE: MD. | CODE:

APPROXIMATE ACREAGE OF NOMINATED PROPERTY:

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:

DATE OF SURVEY: Federol ☐ State ☐ County ☐ Locol ☐

DEPOSITORY FOR SURVEY RECORDS:

STREET AND NUMBER:

CITY OR TOWN: | STATE: | CODE:

STATE: | COUNTY: | FOR NPS USE ONLY: ENTRY NUMBER | DATE

CARR-260

7. DESCRIPTION

CONDITION	(Check One) Excellent ☐ Good ☐ Foir ☐ Deteriorated ☐ Ruins ☒ Unexposed ☐	
INTEGRITY	(Check One) Altered ☐ Unoltered ☒	(Check One) Moved ☐ Originol Site ☒

DESCRIBE THE PRESENT AND ORIGINAL *(If known)* PHYSICAL APPEARANCE

The ruins of Leigh Master's Iron Foundry is a composit of brick and stone overgrown to a great extent but still discernable. There are enough of the ruins existing to make both an interesting architectural and historical study.

It appears that what still stands along the S. slope of a knoll is the N. end or elevation of what was once a rectangular structure resembling a bank barn with the S. elevation either open or of frame construction.

Visable on the N. wall at ground level are two partly filled furnace openings both possessing brick lined segmentally arches and a small square opening on the base of their rear walls presumably for draft or release of molten iron (?). One (E) retains fragments of an iron door.

At the top of the knoll, between the furnace openings, is a deep brick lined opening resembling a well but larger and which has been partly filled in with debris.

Leigh Masters lived at nearby "Avondale"

SEE INSTRUCTIONS

CARR-260

8. SIGNIFICANCE

PERIOD *(Check One or More as Appropriate)*

Pre-Columbian ☐	16th Century ☐	18th Century ☐	20th Century ☐
15th Century ☐	17th Century ☐	ea 19th Century ☒	

SPECIFIC DATE(S) *(If Applicable and Known)*

AREAS OF SIGNIFICANCE *(Check One or More as Appropriate)*

Aboriginol ☐	Educotion ☐	Politicol ☐	Urbon Plonning ☐
Prehistoric ☐	Engineering ☐	Religion/Philosophy ☐	Other *(Specify)* ☐
Historic ☐	Industry ☒	Science ☐	
Agriculture ☐	Invention ☐	Sculpture ☐	
Art ☐	Londscope Architecture ☐	Sociol/Humonitorion ☐	
Commerce ☐	Literoture ☐	Theoter ☐	
Communicotions ☐	Military ☐	Transportotion ☐	
Conservotion ☐	Music ☐		

STATEMENT OF SIGNIFICANCE *(Include Personages, Dates, Events, Etc.)*

SEE INSTRUCTIONS

CARR-260

9. MAJOR BIBLIOGRAPHICAL REFERENCES

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE CDDRDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY						OR	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN ONE ACRE					
CORNER	LATITUDE			LONGITUDE				LATITUDE			LONGITUDE	
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
NW	o	'	"	o	'	"		o	'	"	o	'	"
NE	o	'	"	o	'	"							
SE	o	'	"	o	'	"							
SW	o	'	"	o	'	"							

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE
STATE:	CDDE	CDUNTY:	CODE
STATE:	CODE	COUNTY:	CDDE
STATE:	CODE	COUNTY:	CODE

11. FORM PREPARED BY

NAME AND TITLE: J. Richard Rivoire

ORGANIZATIDN: Field Surveyor, M.H.T.

DATE:

STREET AND NUMBER:

CITY OR TOWN: Annapolis

STATE: Md.

CODE:

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National ☐ State ☐ Local ☐

Name _____

Title _____

Date _____

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

_____

Chief, Office of Archeology and Historic Preservation

Date _____

ATTEST:

_____

Keeper of The National Register

Date _____

SEE INSTRUCTIONS

DEPARTMENT OF PLANNING AND DEVELOPMENT
225. N. Center Street
Westminster, Maryland 21157

WESTMINSTER PLANNING DISTRICT

FIELD SHEET--HISTORIC RESOURCES SURVEY

SURVEY NUMBER: CARR-260

NEGATIVE FILE NUMBER:

UTM REFERENCES:
Zone/Easting/Northing

U.S.G.S. QUAD. MAP: New Windsor

PRESENT FORMAL NAME:

ORIGINAL FORMAL NAME:

COUNTY: CARROLL
TOWN: WESTMINSTER VICINITY
LOCATION: north side of Fenby Farm Road
Tax MAP 45 Block 10 P-532
COMMON NAME: Leigh Master's Iron Foundry (Site)
FUNCTIONAL TYPE: industrial site
OWNER: John D. Hannon
ADDRESS: 133 East Main St.
Westminster, MD 21157

PRESENT USE: open land
ORIGINAL USE: iron foundry
ARCHITECT/ENGINEER:
BUILDER/CONTRACTOR:
PHYSICAL CONDITION OF STRUCTURE:
Excellent ( ) Good ( )
Fair ( ) Poor (X)

ACCESSIBILITY TO PUBLIC:
Yes ( ) No (X) Restricted ( )
LEVEL OF SIGNIFICANCE:
Local ( ) State ( ) National ( )

THEME: industrial archeology
STYLE:
DATE BUILT: c. 1770

GENERAL DESCRIPTION:
Structural System
1. Foundation: Stone ( ) Brick ( ) Concrete ( ) Concrete Block ( )
2. Wall Structure
   A. Wood: Log ( ) Post and Beam ( ) Balloon ( )
   B. Wood Bearing Masonry: Brick ( ) Stone ( ) Concrete ( ) Concrete Block ( )
   C. Iron ( ) D. Steel ( ) E. Other
3. Wall Covering: Weatherboard ( ) German Siding ( ) Board and Batten ( )
   Wood Shingle ( ) Shiplap ( ) Novelty ( ) Stucco ( ) Sheet Metal ( )
   Aluminum ( ) Asphalt Shingle ( ) Brick Veneer ( ) Stone Veneer ( )
   Bonding Pattern: Other:
4. Roof Structure
   A. Truss: Wood ( ) Iron ( ) Steel ( ) Concrete ( )
   B. Other:
5. Roof Covering: Slate ( ) Wood Shingle ( ) Asphalt Shingle ( ) Sheet Metal ( )
   Built Up ( ) Rolled ( ) Tile ( ) Other:
6. Engineering Structure:
7. Other:

Appendages: Porches ( ) Towers ( ) Cupolas ( ) Dormers ( ) Chimneys ( ) Sheds ( )
Ells ( ) Wings ( ) Other:
Roof Style: Gable ( ) Hip ( ) Shed ( ) Flat ( ) Mansard ( ) Gambrel ( ) Jerkinhead ( )
Saw Tooth ( ) With Monitor ( ) With Bellcast ( ) With Parapet ( )
With False Front ( ) Other:
Number of Stories:_____
Number of Bays:_____ Entrance Location:_____
Approximate Dimensions:_____

THREAT TO STRUCTURE:
No Threat ( ) Zoning ( ) Roads ( )
Development ( ) Deterioration ( )
Alteration ( ) Other:

LOCAL ATTITUDES:
Positive ( ) Negative ( )
Mixed ( ) Other:

CARR-260

ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:

Scharf states that the ruins of the stone foundry were in view during the 1880s in his History of Western Maryland

RELATED STRUCTURES: (Describe)

none

STATEMENT OF SIGNIFICANCE:

One of the earliest efforts to establish an iron foundry in Western Maryland

REFERENCES:

1862 Martenet's Map:
1877 LG & S Atlas: Iron Ore
m 45 p 532 693/569

Scharf History of Western Maryland

SURROUNDING ENVIRONMENT:

Open Lane ( )Woodland ( )Scattered Buildings( )
Moderately Built Up ( )Densely-Built Up ( )
Residential ( ) Commercial ( )
Agricultural ( ) Industrial ( )
Roadside Strip Development ( )
Other:

RECORDED BY:

Joe Getty

ORGANIZATION:

Carr. Co. Planning Dept

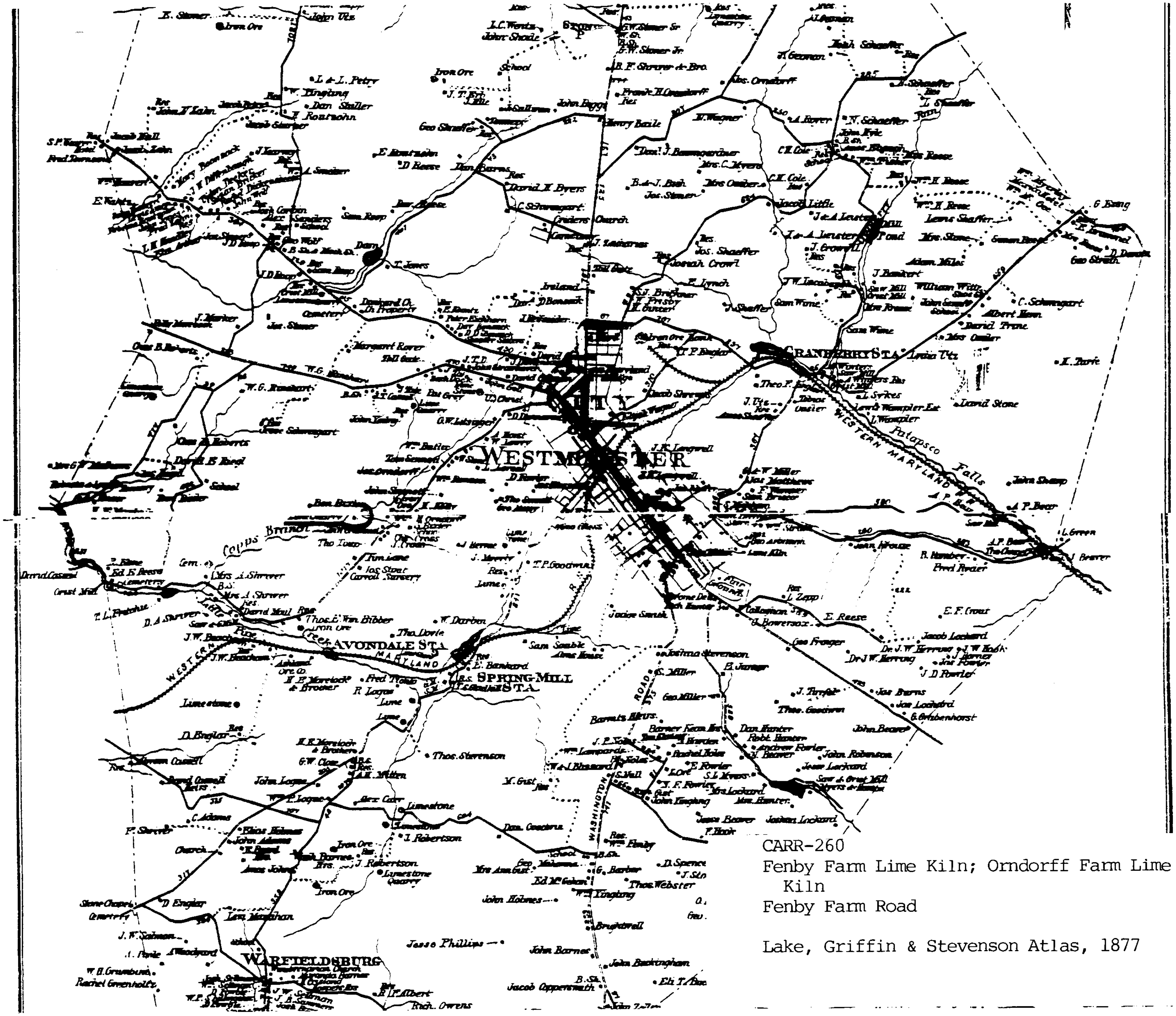
DATE RECORDED:

August 1983


U.S.G.S. MAP
NEW WINDSOR, MD.
1:24000 SCALE
CARR-260
Dunkard
Westminster Airport
Fountain Valley
Roop Mill
Dunkard Ch
Western Maryland College
WESTMINSTER
Radio Tower (WTTR)
Swimming Pool
Flume
Creek
Branch
Copps
Cem.
650 FEET
0.1 MI. TO U.S.140
FENBY 3.9 MI.
23 MI. TO U.S. 40
WESTMINSTER (JUNC. MD. 32) 0.3 MI.

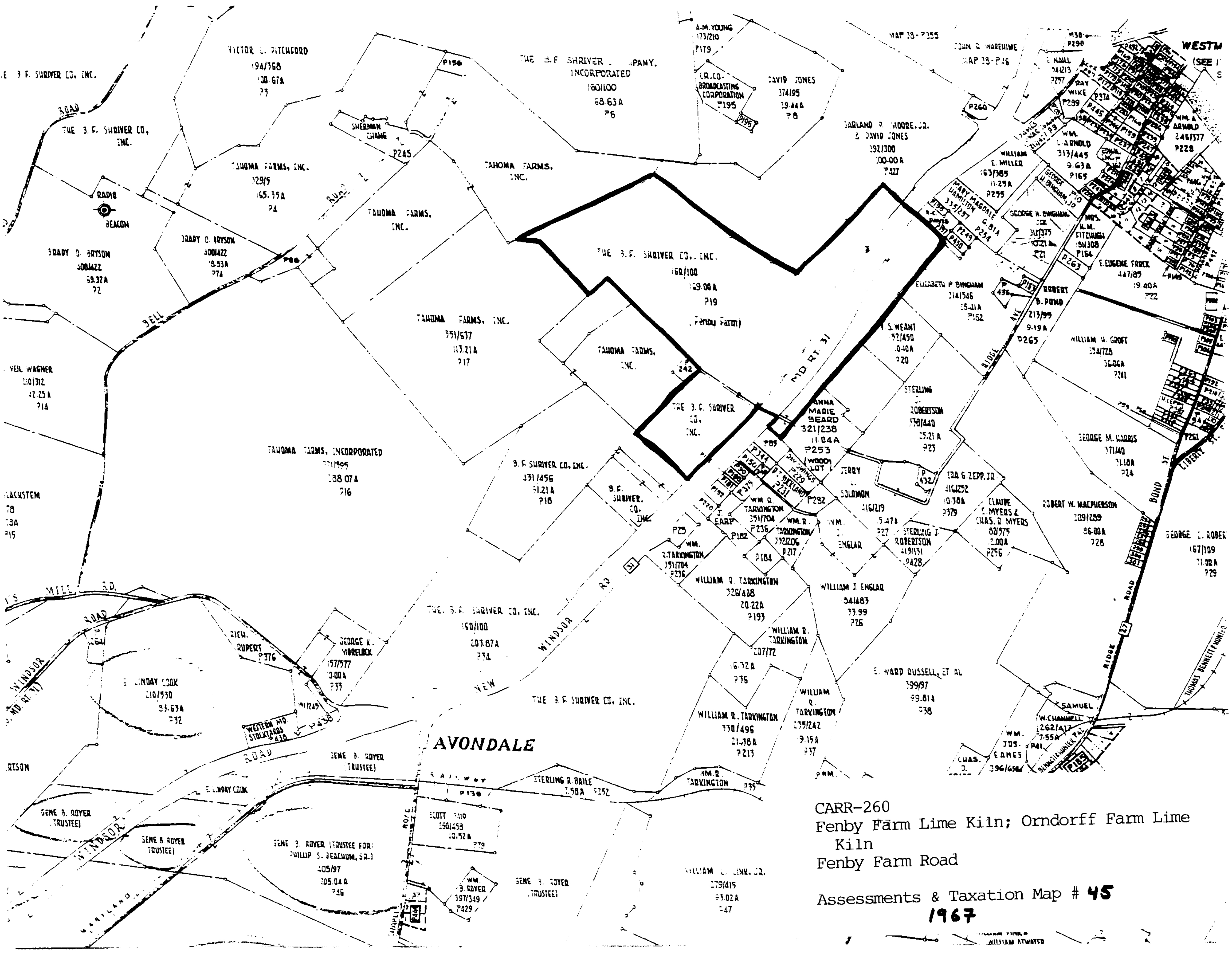
CARR-260
Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road

Martenet Map, 1862



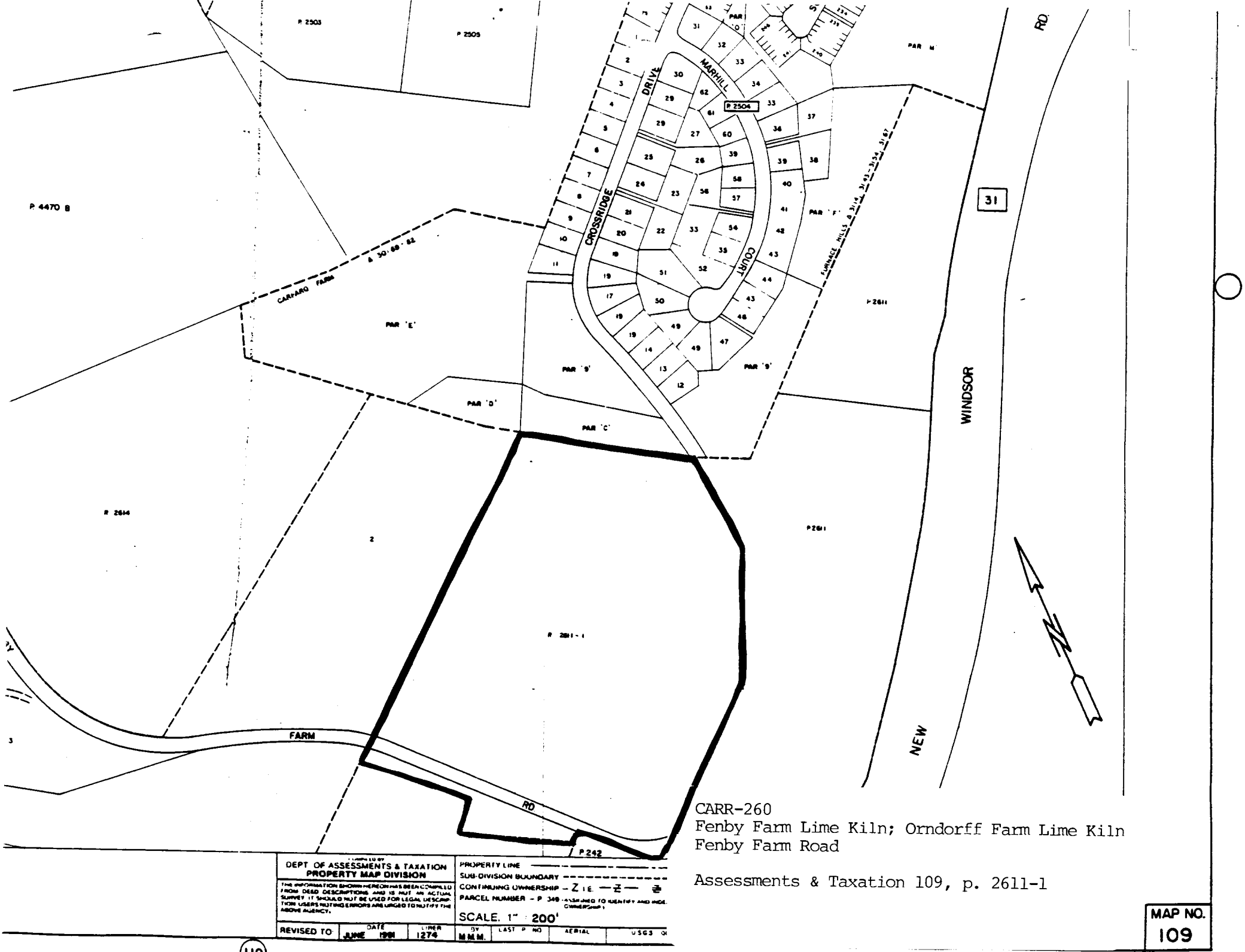
CARR-260
Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road

Lake, Griffin & Stevenson Atlas, 1877



CARR-260
Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road

Assessments & Taxation Map # 45
1967

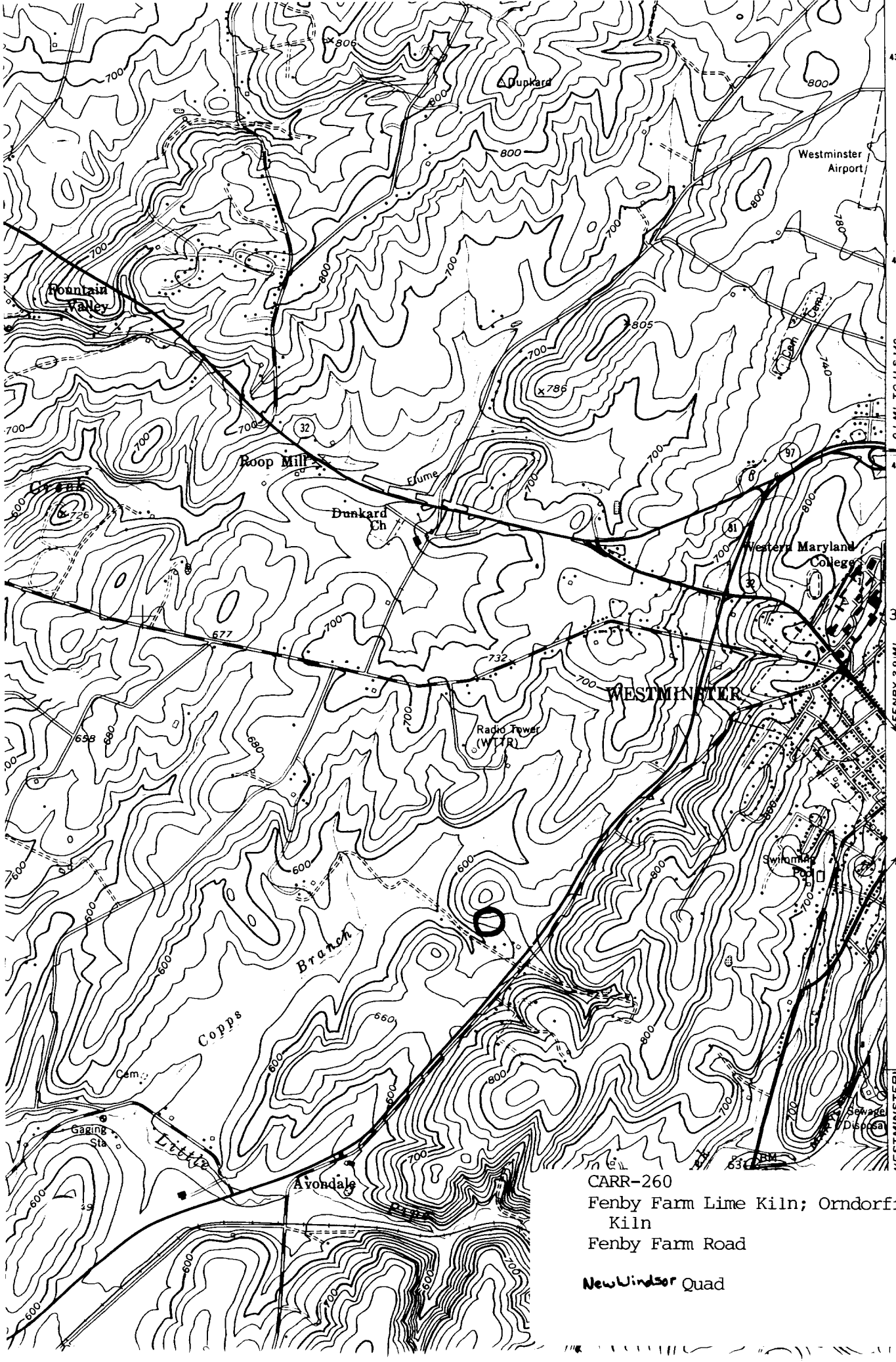


CARR-260
Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road

Assessments & Taxation 109, p. 2611-1

MAP NO. 109

CARROLL COUNTY, MARYLAND



CARR-260

Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln

Fenby Farm Road

New Windsor Quad

CARR-260

Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road
Carroll County, Maryland
Photo: Kenneth M. Short
Date: November 1993
Neg. Loc.: Maryland Historical Trust
LimeKiln - NE Kiln
2/4

CARR-260

Fenby Farm Lime kiln; Orndorff Farm Lime Kiln
Fenby Farm Road
Carroll County, Maryland
Photo: Kenneth M. Short
Date: November 1993
Neg. Loc.: Maryland Historical Trust
Lime Kiln - northeast, Kiln arched open
3/4

CARR-260

Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road
Carroll County, Maryland
Photo: Kenneth M. Short
Date: November 1993
Lime Kiln - Southwest & center kilns

4/4

CARR-260

Fenby Farm Lime Kiln; Orndorff Farm Lime Kiln
Fenby Farm Road
Carroll County, Maryland
Photo: Kenneth M. Short
Date: November 1993
Neg. Loc.: Maryland Historical Trust
Lime Kiln - northeast kiln
1/4

CARR- 260

Leigh Masters Iron Foundry

Fenby Farm Road

11/83
Joe Getty

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